

L 08210-67 EWT(1)

ACC NR: AP6011740

(A)

SOURCE CODE: UR/0317/66/000/003/0046/0048

AUTHOR: Grudinin, I. (Engineer; Major)

35

ORG: None

3

TITLE: Adsorbents and their regeneration

SOURCE: Tekhnika i vooruzheniya, no. 3, 1966, 46-48

TOPIC TAGS: adsorption, dehydration, silica gel, aluminum oxide, zeolite, drier

ABSTRACT: A description of two atmospheric dryers used for dehydration of silica gel, aluminum oxide and various zeolites is presented. These three materials are usually employed for dehumidifying the air in military warehouses. The absorbed moisture is removed from silica gel materials at a temperature of about 150°C during 4 to 6 hours. While aluminum-oxide adsorbents are dehumidified in 3 to 5 hours at temperatures of about 260°C in drip-pans and of temperatures around 400°C in closed containers. The atmospheric dryers of two different compartment types are used. Both are composed of a heat-insulated casing, heating elements, weight-recording instruments, heat exchanger, etc. The essential difference between the two types is in the mode of placing and drying materials. The first type is equipped with a frame carrying eight horizontal drip-pans with materials. Preheated gas passing through various frame sections, heats the pans and dries the materials. In the second type, the materials are kept in their adsorbing cylinder which

Card 1/2

L 08210-67

ACC NR: AP6011740

is suspended inside the dryer. A dry compressed air flow is forced directly through the cylinder. The design features of both dryers are shown in two sectional views. The electrical circuit used for weight recorder and temperature stabilizer is shown in a diagram. Orig. art. has: 3 figures.

SUB CODE: 11, 13/ SUBM DATE: None

Card 2/2 dda

JKI  
ACC NR: AN6021925

SOURCE CODE: UR/9008/66/000/167/0002/0003

AUTHOR: Grudinin, I., (Colonel, Professor, Doctor of Philosophy)

2/3

ORG: none

TITLE: On the essence of war (Merits and shortcomings of a lecture)

SOURCE: Krasnaya zvezda, 21 Jul 66, p. 2, col. 1-7 and p. 3, col. 1-4

TOPIC TAGS: Marxism Leninism, communist military science, nuclear warfare, communism, war philosophy

ABSTRACT: The author reviews in detail a lecture by Lieutenant Colonel Ye. I. Rybkin, entitled "Nuclear war and political activity," distributed by the Central House of the Soviet Army im. M. V. Frunze as a handbook for propagandists. He praises the lecturer for criticizing those Soviet authors who write that there would be no victors in the event of a nuclear war. But he also criticizes the lecturer because his main theme is the possibility of a change having taken place in the . . .

Card 1/2

47462-06  
ACC NR: AN6021925

notion of war, and the possible emergence of a new element in the classical communist definition of war, namely the "continuation of political activity." He stresses that war is indeed, the continuation of political activity, but through additional (violent) means. He holds that Rybkin is in error when he states that notable changes have occurred in basic notion of warfare as a result of nuclear arms. He stresses that the essence of war is class struggle and the close relationship between war and economies. Only the form and expression may change, not the essence. The author concludes his review with a plea for purity of Marxist-Leninist-doctrines.

[GC]

SUB CODE: 05, 15/ SUBM DATE: none/

Card 2/2

GRUDININ, I.A., polkovnik

Dialectics and military science. Mor. abor. 47 no.9:88-90 S '64.  
(MIRA 18:7)

L 51318-65 EWP(c)/EWP(k)/EWP(h)/EWT(d)/T/EWA(d)/EWP(v)/EWP(l) PR-4

ACCESSION NR: AP5009041

S/0302/65/000/001/0060/0061

621.311.172

2.2

2.1

AUTHOR: Grudin, M. G.; Litvinov, A. M.

1.1

3

TITLE: Automatic finder of faults in the distributor of a centralized monitoring system

SOURCE: Avtomatika i priborostroyeniye, no. 1, 1965, 60-61

TOPIC TAGS: fault finder, automatic fault finder, monitoring system

ABSTRACT: The development of an automatic device for quick fault finding in a relay-type local distributor is briefly reported; the distributor serves for successively connecting a number of sensors to the machine. The fault finder generates a cycle of pulses which are intended to operate the distributor in a definite sequence. A central distributor, whose operation is synchronous and cophasal with the one being tested, records and indicates the fault. "A. N. Koval', V. A. Filipenko, and V. G. Shostak took part in building the device."

Orig. art. has: 2 figures.

Card 1/2

L 51318-65

ACCESSION NR: AP5009041

ASSOCIATION: Institut avtomatiki Goskomitets po priborostroyeniya Gosplana  
SSSR (Institute of Automation, State Committee on Measuring Instruments,  
Gosplan SSSR)

SUBMITTED: 00

ENCL: 00

SUB CODE: EC

NO REF SOV: 000

OTHER: 000

BJB  
Card 2/2

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000617110017-7

GRUDIN, M.G.; LITVINOV, A.M.

Device for automatic fault search in a dispersed distributor  
of a centralized control system. Avtom. i prib. no.1:60-61  
Ja-Mr '65. (MIRA 18:8)

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000617110017-7"

BARKHAD, B., kand.med.nauk, dotsent [Barhad, B.]; PILAT, L.; BERDAN, K.;  
PREDA, N.; MIKHEILE, I. [Mihaila, I.]; LILLIS, R.; ELIAS, R.;  
GARTNER, A. [Hartner, A.]; GREDINE, K. [Grudina, K.]; VAYDA, I.;  
IONESCU, K. [Ionescu, K.]

Working conditions and health of salt mine workers. Gig. i san.  
24 no.12:24-30 D '59. (MIRA 13:4)

1. Iz Instituta gigiyeny i obshchestvennogo zdrav'ya Rumynskoy  
Narodnoy Respubliki, Bukharest.  
(MINING)

GRUDININ, A.A.; IVAKIN, V.A.

Apparatus for determining the coal content in raw meal. TSement  
29 no.6:19-20 N-D '63.  
(MIRA 17:3)

1. TSementnyy zavod "Pobeda Oktyabrya", Novorossiysk.

IVAKIN, V.A., inzh.; GULININ, A.A., inzh.

Unit for loading packaged cement in cars. TSement 30 no.3:  
20 My-Je '64.  
(MIRA 17:11)

1. TSementnyy zavod "Pobeda Oktyabrya".

GRUDININ, B.I.

Apparatus for the quantitative evaluation of mineral oil  
impurities on a surface. Zav.lab. 28 no.6:746-747 '62.  
(MIRA 15:5)

1. Artilleriyskaya inzhenernaya akademiya imeni F.E.  
Dzerzhinskogo.  
(Scientific apparatus and instruments)

GHUDININ, Ivan Aleksandrovich, polkovnik, kand.filos.nauk; KHRUSTOV,  
I.P., polkovnik, kand.filosof.nauk, red.; ROMANOV, I.M.,  
podpolkovnik, red.ind-va.

[Dialectical questions in military science] / Voprosy dialektiki  
v voennom delo. Moskva, Voen.izd-vo M-va obor.SSSR, 1960.  
(MIRA 13:11)  
21<sup>4</sup> p.  
(Military art and science) (Dialectical materialism)

S/007/61/000/002/002/004  
B107/B217

## AUTHORS:

Grudinin, M. I., Kuznetsova, A. I.

## TITLE:

Distribution of nickel, chromium, and cobalt in the gabbro-peridotite rocks of the basin of the Tyi river (northern Pribaykal'ye)

## PERIODICAL:

Geokhimiya, no. 2, 1961, 162-168

TEXT: The rocks of the Nyurundukanskiy and Davyrengskiy massif were studied. The most important rocks are: dunite, consisting mainly of olivine poor in iron (0 - 7% fayalite) and of smaller quantities of enstatite or diopside, spinel, magnetite, chlorite, talcum, and serpentine; saxonite, consisting of forsterite (70 - 80%), enstatite (20 - 25%), green spinel and magnetite (2 - 3%); lherzolite, consisting of 60% olivine (up to 15% Fa), 15 - 20% diopside ( $15\% \text{CaFeSi}_2\text{O}_6$ ), 5 - 7% enstatite ( $5\% \text{FeSiO}_3$ ), and approximately 1% light-green spinel and ore. Verlite, consisting of iron-magnesium-olivine, diopside and inconsiderable quantities of isometrical bytownite grains. Peridotites with vein-like plagioclase separations have a kelyphite structure

Card 1/9

S/007/61/000/002/004  
B107/B217

Distribution of ...

and a complicated mineralogical composition: besides olivine there are diopside, enstatite, plagioclase, spinel, ore, and minerals which developed on plagioclase, zoisite, epidote, albite. Small flakes of biotite (lepidomelane) occur in the ultrabasites of the Davyrenskiy massif; spinel is lacking. The massif is much more differentiated until the occurrence of quartz diorites. Magnetite and chromium magnetite ( $a = 8.37 \pm 0.01$  Å) occur in the ore veins. Moreover, sulfide mineralization with pyrrhotite and small quantities of chalcopyrite, pyrite, pentlandite, and sphalerite is found. The analysts N. G. Taskina and L. V. Komarova carried out complete silicate analyses of the most important rocks at the authors' institute (Table 1). A. I. Kuznetsova analyzed a series of samples quantitatively for Ni, Co, and Cr in the spectral laboratory of the Institute; accuracy is  $\pm 8 - 10\%$ . Moreover, Sc, Sr, V, Pb, Zr, and W were found, the content in the Nyurundukanskiy massif reaches hundredth % of Sc and tenth % of V. The mean values for the individual rocks of both massifs were calculated from the determinations of Ni, Co, and Cr (Table 2). The connection between nickel and magnesium content is illustrated in Fig. 1 (Nyurundukanskiy massif) and Fig. 2 (Davyrenskiy massif); the nickel content in the latter rises in proportion to the magnesium content up to 30% MgO and remains then

Card 2/9

Distribution of ...

S/007/61/000/002/002/004  
B107/B217

constant. This is connected with the formation of sulfides, into which nickel enters preferably. Furthermore, Ni, Cr, and Co were determined in olivines, orthorhombic and monoclinic pyroxenes, and in the magnetic fractions (Table 3). No massif shows considerable chromium enrichment; the high content in olivine is due to the mechanical addition of ore. The change of the chromium content with the MgO content in the Nyurundukanskiy massif is parallel to nickel; in the Davyrenskiy massif, the chromium content continues rising also over 30% MgO. The cobalt content rises only inconsiderably. The Nyurundukanskiy massif has less cobalt but more chromium and nickel than the Davyrenskiy massif. The ratio Cr>Ni>Co in the dunites indicates that the latter formed earlier than the basic rocks. This fact was pointed out by V. V. Lyakhovich. There are 2 figures, 3 tables, and 4 Soviet-bloc references.

ASSOCIATION: Vostochno-Sibirskiy geologicheskiy institut SO AN SSSR (East Siberian Geological Institute of the Siberian Branch of the AS USSR)

SUBMITTED: April 25, 1960  
Card 3/9

GRUDININ, M.I.

Geology and petrography of the Davyren gabbro-peridotite  
massif (northern part of the Lake Baikal region). Geol.  
i geofiz. no.6:78-91 '63. (MIRA 19:1)

1. Vostochno-Sibirsksiy geologicheskiy institut Sibirskskogo  
otdeleniya AN SSSR, Irkutsk. Submitted July 24, 1961.

GRUDININ, P.I.

Effect of food supply on the survival of larvae of anchovies in  
the Sea of Azov. Trudy sov. Nauk. kom. no. 13:454-456 '61.  
(MIRA 14:8)

1. Azovskiy nauchno-issledovatel'skiy institut rybnogo  
khozyaystva - AZNIIRKh.  
(Azov, Sea of—Anchovies)  
(Larvae—Fishes)  
(Fishes—Food)

GRUDININ, V., rabochiy ochistnogo zabora; KAVALENKO, P. (g.Bokovoantratsit, Luganskaya obl.); GINZBURG, M., rabochiy ochistnogo zabora

Readers' letters. Sov.shakht. 11 no.11:36 N '62. (MIRA 15:11)

1. Shakhta "Ob'yedinennaya", Chita (for Grudinin). 2. Shakhta  
"Kochegarka", g. Gorlovka, Donetskaya obl. (for Ginzburg).  
(Coal mines and mining)

GRUDININ, V.P., inzhe.

Using metal sliding formwork in shaft sinking. Shakht.  
stroi. 5 no.7:22 Jl '61. (MIRA 15:6)

1. Bryanskoye shakhtostroyupravleniye tresta Kadiyevugol'.  
(Shaft sinking)  
(Concrete construction--Formwork)

GRUDININ, V.P., inzh.

Construction of the shaft top in unstable aqueous alluvial  
soils. Shakht.stroi. 6 no.9:26 S '62. (MIRA 15:9)

1. Trest Kadiyevugol'.  
(Shaft sinking)

GRUDININA, M. M., Cand of Chem Sci — (diss) "The Influence of Colloidal Substances and Components of Water Emulsion of Sterols on the Process of Polymerization," Moscow, 1959, 12 pp (Moscow Chemico-Engineering Institute im D. I. Mendeleyev)  
(KL, 4-60, 115)

5(3), 15(8)  
AUTHORS:

Grudinina, M. M., Aleksandrova, Ye.M. SOV/156-59-2-35/48

TITLE:

The Influence of Some Factors on the Formation of Fine-grained Polystyrene (Vliyanie nekotorykh faktorov na obrazovaniye mikroblochnogo polistirola)

PERIODICAL:

Nauchnyye doklady vysshey shkoly. Khimiya i khimicheskaya tekhnologiya, 1959, Nr 2, pp 354-357 (USSR)

ABSTRACT:

The fine-grained polystyrene formed during the polymerisation depreciates the product to waste. The authors investigated a large number of materials, partly inhibitors of the three-dimensional polymerisation, partly emulsifiers, concerning their capacity to suppress the formation of the fine-grained structure. The results are as follows : The contents of up to 1% of divinylbenzene in the emulsion is not the reason for the formation of the fine-grained structure. A dilution of the styrene-water-emulsion reduces the portion of fine-grained structure, especially when adding sodiumoleate as emulsifier (Fig 1). Of the oleates which were analysed (sodium-, ammonium-, potassium-), potassium oleate is the most effective (Fig 2). Increased addition of the emulsifier reduces the formation of fine-grained polystyrene and changes all qualities

Card 1/2

The Influence of Some Factors on the Formation  
of Fine-grained Polystyrene

SOV/156-59-2-35/48

of the latex. The addition of electrolytes destroys the stability of the emulsion and encourages thereby the formation of the fine-grained structure (Fig 3). There are 3 figures and 5 references, 4 of which are Soviet.

PRESENTED BY: Kafedra kolloidnoy khimii Moskovskogo khimiko-tehnologicheskogo instituta im. D. I. Mendeleyeva (Chair for Colloid Chemistry Moscow Institute for Chemical Technology imeni D. I. Mendeleyev)

SUBMITTED: July 8, 1958

Card 2/2

53831

CYD-1

AUTHORS:

Grudinina, M. M., Aleksandrova, Ye. M. S/153/60/003/01/048/056  
B011/B005

TITLE:

Some Problems of Emulsion Polymerization of Styrene by the Method  
of Tagged Atoms

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya  
tekhnologiya, 1960, Vol 3, Nr 1, pp 176-178 (USSR)

TEXT: The authors assume that the distribution of the emulsifier causes the formation of microblock polymers. A microblock polymer which contains only 1/3 - 1/4 of the emulsifier quantity is formed by drop polymerization of the monomer. The distribution of the emulsifier during emulsion polymerization is complicated. At the initial stages, styrene is emulsified in water; a sorption of the emulsifier on the surface of the disperse monomer drops is also possible; finally, a coupled dissolution of the hydrocarbon in the soap micelles (Ref 4) occurs. The mode of redistribution of the emulsifier during the production of polymeric particles is unknown. Polymerization styrene in the emulsion may be assumed to consist of 3 stages: 1) Styrene-water emulsion; the emulsifier is absorbed on the surface of hydrocarbon drops; 2) heating of the emulsion, desorption of the emulsifier, disintegration of the emulsion into layers, increase in the amount of "non-emulsified" monomer; the micellar soap passes over into the adsorption layers of the polymeric water, and free monomer. To clarify the influence of emulsifier desorption on the

Card 1/3

Some Problems of Emulsion Polymerization of Styrene  
by the Method of Tagged Atoms

69681  
S/153/60/003/01/048/058  
B011/B005

weight of microblocks, the authors investigated the quantitative distribution of the emulsifier among the phases of the system by a tagged emulsifier. Tagged sodium oleate was produced from oleic acid with C<sup>14</sup> in the carboxylic group. In aqueous solution, the oleate retains its ability of forming micelles, and possesses surface activity. Some experiments were carried out with C<sup>14</sup> nondecanic acid sodium. The activity of all samples was measured by a radiometer of type B-2 (end window counter of type T-25-BFL). The relative activities of the microblock-polystyrene- and polymer-coagulate samples were compared by the authors' methods. The absolute molar activity was computed by the formula of V. G. Vasil'yev (Ref 6). For this purpose, all samples were burnt in a "wet" state, and transformed into barium carbonate. The polymer-coagulate samples showed the highest activity. Table 1 shows the results. Hence, it appears that the sorption of the emulsifier is inversely proportional to the dilution modulus of the initial emulsion. The weight of the micro-block polymer increases with the prolongation of the coupled dissolution of styrene in the aqueous emulsifier solution. The activity of the microblock polymer is higher than that of the polymer coagulate (Table 2). In all experiments, the intermicellar liquid showed the lowest activity (Table 3). The authors arrive at the conclusion that in emulsion polymerization the solubilization of the hydrocarbon in the soap micelles must not exceed a certain optimum limit. To protect the styrene microvolumes from coalescence, the strength of the absorption layers of

Card 2/3

Some Problems of Emulsion Polymerization of Styrene  
by the Method of Tagged Atoms

69681  
S/153/60/003/01/048/058  
B011/B005

potassium-, sodium-, or ammonium oleate is insufficient. There are 3 tables  
and 7 references, 6 of which are Soviet.

ASSOCIATION: Moskovskiy khimiko-tehnologicheskiy institut im. D. I. Mendeleyeva;  
Kafedra kolloidnoy khimii  
(Moscow Institute of Chemical Technology imeni D. I. Mendeleyev;  
Chair of Colloid Chemistry)

SUBMITTED: April 10, 1959

Card 3/3

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000617110017-7

GRUDININA, M.M.; ALEKSANDROVA, Ye.M.

Importance of solubilization and phase conversion in the emulsion  
polymerization of styrene. Plast.massy no.5:11-14 '61.

(MIRA 14:4)  
(Styrene)

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000617110017-7"

5.3830 2209

32644  
S/076/62/036/001/017/017  
B119/B101

AUTHOR: Grudinina, M. M.

TITLE: Effect of the oil- and water-solubility of peroxide initiators  
on the conditions of microblock polystyrene formation

PERIODICAL: Zhurnal fizicheskoy khimii, v. 36, no. 1, 1962, 233 - 234

TEXT: The author investigated the effect of various peroxide initiators during polymerization of styrene in an emulsion upon the formation of coarser polystyrene microblocks undesirable in practice. Styrene, emulsifiers (sodium oleate, potassium oleate, polyvinyl alcohol, gelatin), the cation-active substance equalizer «A» ("A"), as well as the initiators  $K_2S_2O_8$ ,  $H_2O_2$ , benzoyl peroxide, azoisobutyric acid dinitrile ("porofor") were used as initial materials. The ratio of styrene: water mixture was 1:2, the emulsifier content was 1 - 5%, and the content of initiator was 1% (both related to the addition of styrene). After adding styrene to the emulsifier-water mixture at  $18 - 20^{\circ}\text{C}$ , stirring was continued for 15 - 20 min, then the initiator added and the mixture kept at  $95 - 96^{\circ}\text{C}$  (15 min). After cooling, the finished latex was filtered through gauze, Card 1/2 X

Effect of the oil- and water-solubility...

32644  
S/076/62/036/001/017/017  
B119/B101

and the amount of polystyrene microblocks in the residue was weighed. The very brittle microblocks melt at 130 - 140°C, and are readily soluble in benzene and toluene. The experiments have shown that the formation of microblocks depends on the types of emulsifier and initiator. With the use of the same emulsifier, oil-soluble initiators (benzoyl peroxide, azoisobutyric acid dinitrile) increase the yield of microblocks (30 - 80%). Insignificant quantities of microblocks are obtained when using the highly active  $K_2S_2O_8$ , which is readily soluble in water, while the yield amounts up to 13% in the presence of  $H_2O_2$ . The cation-active substance "A" furthers microblock formation. There are 6 Soviet references.

ASSOCIATION: Moskovskiy institut inzhenierov transporta (Moscow Institute of Transportation Engineers)

SUBMITTED: July 6, 1961

Card 2/2

BUDEIL'KO, T.A., kandidat, nauk; GRUDININA, S.M.; YERMILOVA Ie.N.

Three years work experience in a consolidated serological laboratory. Vest.derm. i ven. no.9:71-73:62. (MIKA 16:7)

1. Iz mezhraionnoy serologicheskoy laboratorii pri kozhno-venerologicheskem dispensare no.3 Leningrada.  
(LENINGRAD-SEROLOGY)

ALEKSANDROV, S.V., kand.sel'skokhoz.nauk; BOGUSHEVSKIY, A.A., kand.tekhn.  
nauk; VASHCHENKO, S.F., kand.sel'skokhoz.nauk; GERASIMOV, B.A.,  
kand.sel'skokhoz.nauk; OROMOV, N.O. [deceased]; KORBUT, V.A.;  
KUDREVICH, I.A.; MAMAYEV, M.G., kand.tekhn.nauk; NOVIKOV, A.P.;  
OSNITSKAYA, Ye.A.; SIMANOVSKIY, A.Yu.; SLEPTSOV, S.A.; SPIRIDONOVA,  
A.I.; TARAKANOV, G.I., kand.sel'skokhoz.nauk; CHENYKATEVA, Ye.A.;  
KITAYEV, S.I., red.; FILATOV, N.A., zasluzhenny agronom RSFSR;  
~~GRUDINKINA, A.P.~~, red.; MARTYNOV, P.V., red.; ARTSYBASHEVA, A.P.,  
tekhn.red.; BARRASH, V.L., tekhn.red.

[Vegetable growing under cover] Ovoshchevodstvo zashchishchennogo  
grunta. Moskva, Izd-vo M-va sel'.khoz.SSSR, 1960. 279 p.

(Vegetable gardening) (Greenhouses)  
(Hotbeds)

(MIRA 13:12)

IVANOV, A.A. Prinimali uchastiye SOKOLOV, D.S.; VASIL'YEV, N.A.;  
IOFFE, N.S.; KRASNOV, V.S., nauchnyy red.; GRUDINKINA, A.P.,  
red.; STREL'TSOVA, N.P., red.; ARTSYBASHEVA, A.P., tekhn.  
red.; KANTOROVICH, A.P., tekhn. red.

[Mechanization of work in animal husbandry] Mekhanizatsiya  
rabot v zhivotnovodstve. Moskva, Sel'khozizdat, 1962. 92 p.  
(MIRA 16:5)

1. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyayatven-  
nykh nauk imeni V.I.Lenina (for Krasnov).  
(Stock and stockbreeding--Equipment and supplies)

GRUDINKINA, K.K.

Alushta Station. Zashch. rast. ot vred. i bol. 7 no. 10:39-40  
0 '62.  
(MIRA 16:6)

1. Zaveduyushchaya Alushtinskim punktom signalizatsii i progonosov.  
(Alushta District—Plants, Protection of)

GRUDINKINA, N.P.

Absorption quantitative analysis of cadmium sulfate. Trudy  
VNIIM no.34:58-60 '58. (MIRA 13:5)  
(Cadmium sulfate)

BREGMAN, K. Ya.; GRUDINKINA, N.P.

Obtaining and testing high-purity zinc, Izm.tekh, no.5:23-24 My '61.  
(MIRA 14:5)  
(Zinc—Electrometallurgy)

GRUDINKINA, N.P.

Determination of the isotopic composition of silver with an  
MI-1305 -type mass spectrometer. Trudy inst. Kom. stand.,  
mer i izm. prib. no.68:117-119 '63. (MIRA 17:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii  
im. D.I. Mendeleyeva.

CRUDINKINA, N. P.

CRUDINKINA, N. P. "Determination of the Purity of Water using Ultra-Violet Spectrophotometry." Commission on Standards, Measures, and Measuring Instruments, Council of Ministers USSR. All-Union Sci Res Inst of Metrology imeni D. I. Mendeleyev. Leningrad, 1956. (Dissertation for the Degree of Candidate in Sciences)  
Technical

So: Knizhaya Letopis', No. 17, 1956

USSR/Optics - Optical Methods of Analysis. Instruments.

K-7

Abs Jour : Referat Zhur - Fizika, No 5, 1957, 13109

Author : Grudinkina, N.P.

Inst : -

Title : Absorption of Ultraviolet Radiation by Water.

Orig Pub : Optika i spektroskopiya, 1956, 1, No 5, 658-662

Abstract : A photoelectric method was used to determine the values of the index of absorption of water of various degrees of purity in the ultraviolet portion of the spectrum. The absorption index after the fourth and successive distillations does not change, and therefore the third-distillation water was called the "water of maximum purity". It has no absorption bands in the ultraviolet regions up to 230 millimicrons, while the general attenuation of the beam is explained by molecular scattering. The absorption bands of water of first and second distillations indicate the presence of salts of iron, silicon, calcium oxide,

Card 1/2

USSR/Optics - Optical Methods of Analysis. Instruments.

K-7

Abs Jour : Ref Zhur - Fizika, No 5, 1957, 13109

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110017-7"

magnesium, and copper and a certain amount of organic compounds. A new method is proposed for determining the purity of water with the aid of ultraviolet spectrophotometry.

Card 2/2

PRIKHOT'KO, A F

24(7)

b3

PHASE I BOOK EXPENSES

GRUDINOVSKIY, L. G.

"Some Peculiarities in the Electromechanical Treatment of Fruits and Vegetables." Card Tech Sci, Moscow Technological Inst of Food Industry, Min of Higher Education USSR, Odessa, 1954. (KL, No 8, Feb 55)

SO: Sum. No. 631, 26 Aug 55-Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (14)

USSR / Radiophysics

I

Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 10010

Author : Grudinskaya, G.

Inst : Not given

Title : Experience in Regular Communication at Meter Waves

Orig Pub : Radio, 1956, No 10, 33

Abstract : Brief summary of the article by Bailey et al. (Referat  
Zhurnal - Fizika 1956, No 17442).

Card : 1/1

PHASE I BOOK EXPLOITATION

379

Grudinskaya, Galina Petrovna

Rasprostraneniye ul'trakorotkikh radiovoln (Microwave Propagation) Moscow, Gosenergoizdat, 1957. 62 p. (Massovaya radiobiblioteka, vyp. 281) 30,000 copies printed.

Ed.: Chechik, P.O.; Tech. Ed.: Larionov, G. Ye.; Editorial Board of series: Berg, A.I., Dzhigit, I.S., Kulikovskiy, A.A., Smirnov, A.D., Tarasov, F.I., Chechik, P.O., and Shamshur, V.I.

PURPOSE: The monograph is addressed mainly to qualified radio amateurs working with microwaves.

COVERAGE: The book is concerned with the fundamental problems of microwave propagation, and acquaints the reader with the latest results of experimental research in the field. Specific cases of microwave reception over long distances are cited, together with some recommendations for duplicating these results. The booklet offers methods for calculating the field intensity in the simplest cases of microwave propagation. At present the

Card 1/4

**Microwave Propagation**

379

following microwave bands have been allotted to radio amateurs in the Soviet Union: 38 to 40 and 144 to 146 Mc in the one meter band, 420 to 425 Mc and 1,470 to 1,520 Mc in the decimeter band, and 5,650 to 5,850 Mc in the centimeter band. The Soviet scientists Vvedenskiy, B.A. (pp. 4,20), Arenberg, A.G., and Fok, V.A. are mentioned as having made valuable contributions in the field of radiowave propagation in recent years (pp. 4,33). The Moscow Power Engineering Institute is designated as the organization to which all data on observations made by radio amateurs of microwave behavior should be submitted for comparison with the results obtained by other amateurs. There is a bibliography of eight Soviet sources, all in Russian.

**TABLE OF  
CONTENTS:****Introduction**

Ch. I. Basic Concepts of Radio Wave Propagation	3
Ch. II. The Structure and Electric Properties of the Atmosphere and the Earth's Surface	6
The surface of the earth	11
Card 2/4	11

Microwave Propagation	379
The troposphere	12
The ionosphere	14
Ch. III. The Propagation of Microwaves Within the Optical Horizon	
Distances far below the limit of line of sight	18
Distances approaching the limit of line of sight	19
The effect of irregularities of the earth's surface	22
Ch. IV. Tropospheric Propagation of Microwaves	
Diffraction	25
Refraction and the emergence of the "atmospheric duct"	32
Reflection from the irregularities in tropospheric layers	34
Scattering of radio waves on the irregularities of tropospheric layers	41
	42

Card 3/4

Microwave Propagation	379
Ch. V. Ionospheric Propagation of Microwaves	
Reflection from the regular F <sub>2</sub> layer	47
Reflection from the sporadic E <sub>s</sub> layer	47
Scattering on the irregularities of ionospheric layers	49
Reflection from traces of meteors and the aurora borealis	52
Ch. VI. Microwave Reception Interference	57
Conclusion	59
Bibliography	61
	63

AVAILABLE: Library of Congress

JJP/ksv  
6-23-58

Card 4/4

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000617110017-7

GRUDINSKAYA, G.P., kandidat tekhnicheskikh nauk.

Ultrashort wave radio communication system using radio waves  
reflected from meteor traces. Vest. sviazi 17 no.3:6-7 Mr '57.  
(Radio, Shortwave) (MLRA 10:4)

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000617110017-7"

PHASE I BOOK EXPLOITATION SOV/5549

Grudinskaya, Galina Petrovna

Rasprostraneniye ul'trakorotkikh radiovoln (Propagation of VHF and Microwaves) 2d ed., rev. Moscow, Gosenergoizdat, 1960. 103 p. (Series: Massovaya radiobiblioteka, vyp. 382) 50,000 copies printed.

Editorial Board: A. I. Berg, F. I. Burdeyny, V. A. Burlyand, V. I. Vaneyev, Ye. N. Genishta, I. S. Dzhigit, A. M. Kanayeva, E. T. Krenkel', A. A. Kulikovskiy, A. D. Smirnov, F. I. Tarasov, and V. I. Shamshur; Ed.: A. Kh. Yakobson, Tech. Ed.: N. I. Borunov.

PURPOSE : This book is intended for experienced radio amateurs.

COVERAGE: This book contains information on radio waves, antennas, and the electrical properties of the earth and its atmosphere. Special features of the propagation of radio waves of various ranges, with emphasis on the wave range from 10m down, are discussed. No personalities are mentioned. There are 6 references, all Soviet.

Card 14

DOLUKHANOV, Mark Pavlovich; GRUDINSKAYA, G.P., retsezent; VASIL'YEV,  
Ye.N., retsezent; BARTENEV, G.M., retsezent; VORONOVA, A.I.,  
red.; KARABILOVA, S.F., tekhn.red.

[Propagation of radio waves] Rasprostranenie radiovoln. Izd.2.  
Moskva, Gos.izd-vo lit-ry po voprosam sviazi i radio, 1960.  
390 p.

(Radio waves)

(MIRA 14:2)

GRUDINSKAYA, Galina Petrovna, kand. tekhn. nauk; VASIL'IEV, Ye.N.,  
kand. tekhn. nauk, dots., red.

[Propagation of radio waves] Rasprostranenie radiovoln; kon-  
spekt lektsii dlja vechernego otdelenija radiotekhnicheskogo  
fakul'teta. Moskva, Mosk. energeticheskii in-t, 1961. 159 p.  
(MIRA 16:4)

(Radio waves)

MAKOV, K.I., prof. Prinimala uchastiye GRUDINSKAYA, I.T., gidrogeolog.  
CHERNOV, B.I., ctv.red.; SEMIKHATOV, A.N., prof., red.;  
PRILUTSKIY, G.L., tekhn.red.

[Hydrogeology of the U.S.S.R.; the Urals] Gidrogeologija SSSR;  
Ural. Moskva, Izd-vo Akad.nauk USSR. Book 2. [Underground  
waters of the Bashkir A.S.S.R.] Podzemnye vody Bashkirskej  
ASSR. Red.A.N.Semikhato. Pt.1. [Text] Tekst. 1946. 355 p.  
(MIRA 15:5)

1. Akademija nauk URSR, Kiev. Instytut geologichnykh nauk.
2. Deystvitel'nyy chlen AN USSR (for Chernyshov).  
(Bashkiria—Water, Underground)

GRUDINSKAYA, I.T. [Hrudyns'ka, I.T.]

Underground waters in the vicinity of the Chernyy les (Ukrainian  
S.S.R., Kirograd Province). Geol. zhur. 19 no.3:73-78 '59.  
(MIRA 12:10)

(Kirovograd Province--Water, Underground)

GRUDINSKAYA, I.T. [Hrudyns'ka, I.T.]

Behavior and origin of interstitial waters in the southwestern part  
of the Ukrainian crystalline shield. Geol. zhur. 20 no.2:108-111  
'60.

(MIRA 14:5)

(Ukraine—Water, Underground)

GRUDINSKAYA, Irina Timofeyevna [Hrudyns'ka, I.T.]; VASHCHENKO, V.M.,  
kand.geol.-mineral.nauk, otv.red.

[Underground waters of the Ukrainian Crystalline Shield (Polesye  
a. the forest steppe).] Pidzemni vody ukrains'koho krystalichnogo  
shchytta (Polissia ta lisostep) Kyiv, "Naukova dumka," 1964. 107 p.  
(Akademiiia nauk URSR. Kiev, Instytut geologichnykh nauk. Pratsi.  
Seriiia hidrogeologii i inzhenernoi geologii, no. 11) (MIRA 17:6)

GRUBINSKAYA, I.T.

Variations in the regime of ground waters in the coastal area  
of the Dnieper and Kakhovka Reservoirs. Trudy VSEGINGEO no.10:  
183-185 '64.  
(MIRA 17:10)

1. Severo-Ukrainskaya gidrogeologicheskaya stantsiya.

GRUDINSKIY, P. G.

USER/Elec Power System 4501.0100 Nov 1947

"Technical Trends in the Development of the Power Systems of the USSR," Prof. P. G. Grudinskiy, A. Strygavatnikov, Candidate Tech Sci, 7 pp

"Elek Stantsii" Vol XVIII, No 11

Discusses development of electric networks, electric systems (development and three basic systems), organizing exploitation of electric systems (covers problems of training personnel in use of proper techniques), and measures adopted to increase dependency. Gives summary of basic principles to be followed in further development of power system. Graphs show: growth of electric power plant capacity during 1947

USER/Elec Power System 4501.0100 (Contd) Nov 1947

30-year period, growth in size of largest generators used at stations, relationship between mileage of various capacity lines (35-110 kv, 110 kv, 154-220 kv and 35 kv lines) from 1928 to 1950, and three basic electric systems.

18G49

18G49

GRUDINSKY, V. G.

TA 3/50127

USSR/Engineering - Electric Power Stations Jan 48

Gas, Natural

"Experience of Operating an Electric Power Station  
on Natural Gas," A. F. Gorelov, Engr, 4 pp

"Elek Stants" No 1

Describes how boilers, with 85-110 tons/hr output,  
were changed over from fuel oil to natural gas.  
Experience of over a year has shown that method  
adopted was reliable when safety precautions were  
strictly observed. Efficiency of plant was in-  
creased and pollution of air decreased. At times,  
however, it was necessary to change back to fuel.

3/50127

USSR/Engineering - Electric Power Stations Jan 48  
(Contd)

oil rapidly due to sudden failures in gas supply.  
Scientific research organizations should devote  
more attention to evolving suitable equipment for  
use with natural gas since demand for it will grow  
each year. Includes five diagrams.

3/50127

GRUDINSKIY, P. G.

"The Problem of Safety Rules for Electrical Installations of Industrial Enterprises," Prom. energet., No.12, 1949

Prof., Moscow Power Eng. Inst.

KHAVIN, N.Z., inzh.; GRUDINSKIY, P.G., prof., red.; LARIONOV, G.Ye..  
tekhn.red.

[Safety rules in the operation of electrical apparatus of  
urban and rural networks] Pravila bezopasnosti pri eksploa-  
tatsii elektricheskikh ustroistv gorodskikh i sel'skikh setei.  
Izd.stereotipnee. Meskva, Gos.energ.iзд-во, 1950. 87 p.  
(MIRA 13:6)

1. Russia (1923- U.S.S.R.) Ministerstvo elektrostantsiy.

Tekhnicheskoye upravleniye.

(Electric engineering--Safety measures)

GRUDINSKIY, P. G. PROF

A 161T11

USSR/Electricity - Distribution Instal-  
lations  
Literature

Feb 50

"Review of Ye. F. Ioffe's Book, 'Operational Work in  
High-Voltage Distribution Installations,'" Prof  
P. G. Grudinskiy, 1 p

"Elek Stants No 2

Reviews favorably. Book is systematic presentation  
of material contained in various Min of Elec Power  
Plants instructions issued at different times. Pub-  
lished by Gosenergoizdat, 1949, 54 pp.

161T11

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000617110017-7

editors GRUDINSKIY, P. G., G. N. PETROV, A. M. FEDOSEYEV, M. G. CHILIKIN and A. T. GOLOVAN

"Electro-Technical Handbook" State Publishing House for Energy, Moscow-Leningrad,  
1952.

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000617110017-7"

**"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110017-7"**

GRUDINSKIY, P. G.

"Electric Transmitter of the Kashir Hydro-Electric Station- Moscow," Electricity,  
Publ. by the Printing House of the Govt. Energy (Electrical) Publ. House, in  
Moscow, 1952.

**APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110017-7"**

CHILIKIN, V. G.: SUKOVEL, A. S.: SOLOV'YEV, I. I.: SIRSTINSKIY, L. I.: SEL'KIND, L. D.:  
PEROSEV, A. V.: GRUDINSKIY, P. G.: UL'YANOV, S. A.: VENIKOV, V. A.: MEDVEDEV, E. P.:  
SOLDATKINA, L. A.: VASIL'YEV, A. A.: ROZANOV, G. N.: ANISIMOVA, N. D.

Professor A. A. Glazunov. On His 60th Birthday and 30th Year of Scientific Pedagogical,  
Engineering, and Society Activity. Elektrичество, No. 1, 1952.

SO: Monthly List of Russian Accessions, Library of Congress, April 1952 [redacted], Uncl.

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000617110017-7

GRUDINSKIY, P. G. Prof.

"Electric Transmission from the Kashira Hydroelectric Power Station to  
Moscow," Elektrичество, No.6, 1952

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000617110017-7"

GUSEV, S.A., inzh.; ZHUKHOVITSKIY, B.Ya., kand.tekhn.nauk; ZARIN, D.D., kand.tekhn.nauk; IVANOV-SMOLENSKIY, A.V., kand.tekhn.nauk; KNYAZEVSKIY, B.A., kand.tekhn.nauk; KUZNETSOV, A.I., inzh.; KOZIS, V.L., kand.tekhn.nauk; KORYTIN, A.A., inzh.; LASHKOV, F.P., inzh.; L'VOV, Ye.L., kand.tekhn.nauk; MULESHKINA, L.P., kand.tekhn.nauk; NEKRASOVA, N.M., kand.tekhn.nauk; NIKULIN, N.V., kand.tekhn.nauk; POLEVAY, V.A., kand.tekhnicheskikh nauk; RAZEVIG, D.V., kand.tekhn.nauk; ROZANOV, G.M., kand.tekhn. nauk; RUMSHISKIY, L.Z., kand.fiz.-matem.nauk; SVISTOV, N.K., kand.tekhn.nauk; SIROTINSKIY, Ye.L., kand.tekhn.nauk; SOKOLOV, M.M., kand.tekhn.nauk; TALITSKIY, A.V., prof.; TREMBACH, V.V., inzh.; FEDOROV, A.A., kand.tekhn.nauk; GRUDINSKIY, P.G., prof.; PRYTKOV, V.T., kand.tekhn.nauk; CHILIKIN, M.G., prof., glavnyy red.; GOLOVAN, A.T., prof., red.; PETROV, G.N., prof., red.; FEDOSEYEV, A.M., prof., red.; ANTIK, I.V., red.; SKVORTSOV, I.M., tekhn.red.

[Handbook for electric engineering] Elektrotekhnicheskii spravochnik. Moskva, Gos.energ.izd-vo, 1952. 640 p. (MIRA 13:2)

1. Prepodavateli Moskovskogo energeticheskogo instituta imeni V.M. Molotova (for all except Antik, Skvortsov).  
(Electric engineering)

GRUDINSKIY, P. G.

IA 248T28

USSR/Electricity - Power Factor  
Induction Motors

Feb 53

"Discussion: On Measures to Raise the Power Factor  
of Electrical Installations of Industrial Enter-  
prises," Dr Tech Sci I. A. Syromyatnikov, Tech  
Admin of Min of Elec Pow Stas USSR; Prof P. G. Grud-  
insky, Moscow; Engr M. S. Likhachev, Moscow;  
Docent L. V. Litvak, Cand Tech.Sci., Moscow; Dr. Tech  
Sci L. B. Geyler, Moscow

Elek-vo, No 2, pp 80-88

Consists of five letters from above-noted persons  
commenting on materials published in "Elektrichesvo"

248T28

during 1952 on subject of raising power factor  
through synchronization of induction motors by DAG  
system. The point most often brought out in let-  
ters is that use of DAG system is only stop-gap  
measure and that real solution to problem lies  
only in adequate production of synchronous motors  
and static capacitors.

248T28

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000617110017-7

MARTYNYUK, A.K., inzhener; MUSATOV, T.P., inzhener; GRUDINSKIY, P.G.; LEBEDEVA, V.I.  
46 N '53.

Electric circuit scheme in the form of a "rectangle." Elek.sta. 24 no.11:43-

(MLRA 6:11)  
(Electric circuits)

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000617110017-7"

CHILIKIN, M.G.; GLAZUNOV, A.A.; STEPANOV, V.N.; TELESHEV, B.A.; GRUDINSKIY,  
P.G.; VENIKOV, V.A.; MEL'NIKOV, N.A.; ROGALI-LEVITSKIY, M.V.; GLAZUNOV,  
A.A.; SOLDATKINA, L.A.; ZHUKOV, L.A., ANISIMOVA, N.D.

A.IA.Riabkov. Obituary. Elektrichestvo no.3:92 Mr '54. (MLRA 7:4)  
(Riabkov, Aleksandr Iakovlevich, 1890-1954)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110017-7"

Subject : USSR/Electricity

Card 1/1 Pub. 27 - 19/35

Author : Grudinskiy, P. G., Prof., Moscow

Title : V. M. Dmitriyev's article: "Determination of an Economic-  
cal Current-Carrying Capacity in a Cable Distribution  
Network", in Elektrichestvo, #10, 1953 (Discussion)

Periodical : Elektrichestvo, 8, 77-79, Ag 1954

Abstract : V. M. Dmitriyev's method is criticized as wrong. The  
author presents a graph, formulae and a numerical example  
to support his criticism. 2 Russian references (1950, 1951)

Institution : Moscow Institute of Power Engineering im. Molotov

Submitted : No date

CHILIKIN, M.G.; GLAZUNOV, A.A.; STEPANOV, V.N.; TELESHEV, B.A.;  
GRUDINSKIY, P.G.; VENIKOV, V.A.; MEL'NIKOV, N.A.;  
ROGALI-LEVITSKIY, M.V.; ROZANOV, G.M.; GLAZUNOV, G.M.;  
SOLDATKINA, L.A.; ZHUKOV, L.A.; ANISIMOVA, N.D.

Aleksandr IAkovlevich Riabkov; obituary. Elek.sta. 25 no.2:  
59 F '54. (MLRA 7:2)  
(Riabkov, Aleksandr IAkovlevich, 1890-1954)

СВЕДЕНИЯ, Р...

BERNAKOV, V.S.; KIOCHIKOV, I.M.; CHIZHOV, D.G.; KOGLEV, G.I.; LAVREICH-  
KO, K.D.; NEKRASOV, A.M.; SPIRIN, S.A.; VESELOV, N.D.; KOTTEVSKIY, D.G.;  
SHIRNOV, G.V.; MARINOV, A.N.; MAKSIMOV, A.A.; IVANOV, M.I.; MEKOV, A.P.;  
CHUPRAKOV, N.M.; AVTONOMOV, B.V.; SYROMYATNIKOV, I.A.; MOLOKANOV, S.I.;  
FAERMAN, S.TS.; GORSHKOV, A.S.; GOL'DENBERG, P.S.; SOKOLOV, B.M.; MA-  
KUSHKIN, Ya.G.; MKHITARYAN, S.G.; RASSADNIKOV, Ye.I.; GRUDINSKIY, P.G.;  
FCMICHEV, G.I.; SHCHERBININ, B.V.; ZAYTSEV, V.I.; KCKOTEV, S.V.; KLEY-  
SHIN, M.P.; FESCHANSKIY, V.I.; SAFRAZBEKYAN, G.S.; i dr...

IUrii Prokhorovich Komissarov; obituary. Elek.sta. 25 no.5:60 My '54.  
(Komissarov, IUrii Prokhorovich, 1910-1954) (MLRA 7:6)

GOLOVAN,A.T., professor, redaktor; GRUDINSKIY,P.G., professor, redaktor;  
PETROV,G.N., professor, redaktor; FEDOSETEV,A.M., professor, redaktor;  
CHILIKIN,M.G., professor, reiaktor; ANTIK,I.V., inzhener, redaktor;  
SKVORTSOV,I.M., tekhnicheskij redaktor

[Electric engineering handbook] Elektrotekhnicheskiy spravochnik. Issd.  
2-oe, perer. Pod obshchei red. V.M.Molotova, i dr. Moskva, Gos.energ.  
Vol.1. 1955. 527 p. Vol.2. 1955. 624 p. (MIRA 9:1)

1. Moskovskiy energeticheskiy institut imeni V.M.Molotova (for all  
except Skvortsov)

(Electric engineering--Handbooks, manuals, etc.)

UGORETS, I.I.; GLAZUNOV, A.A.; SYROMYATNIKOV, I.A.; KASHUNIN, I.S.; POSTNIKOV, N.A.; RADTSIG, V.A.; UL'YANOV, S.A.; GRUDINSKIY, P.G.; VASIL'YEV, A.A.; KUVSHINSKIY, N.N.; BAPTIDANOV, L.N.; TARASOV, V.I.; KRIKUNCHIK, A.B.; SHAPIRO, A.B.; BIBIKOV, V.V.; DVOSHIN, L.I.; KLINGOF, I.D.; KARPOV, M.M.; USPENSKIY, B.S.; CHALIDZE, I.M.; BLOCH, Ya.A.; SHMOTKIN, I.S.

Iesif IAkevlevich Gumin; obituary. Elek.sta.26 no.12:58 D 155.  
(Gumin, Iesif IAkovlevich, 1890-1955) (MLRA 9:4)

112-57-7-14257

Translation from: Referativnyy zhurnal, Elektrotehnika, 1957, Nr 7,  
pp 69-70 (USSR)

AUTHOR: Grudinskiy, P. G., and Lebedev, B. P.

TITLE: Simplification and Cost Cutting of Step-Down Substations in 90-225 kv Networks of the French State Electrical Authority (Uproshcheniye i udeshevleniye ponizitel'nykh podstantsiy v setyakh 90-225 kv Frantsuzskogo gosudarstvennogo elekrotehnicheskogo upravleniya)

PERIODICAL: Energokh-vo za rubezhom (Power Utilities in Foreign Countries),  
1956, Nr 4, pp 26-32

ABSTRACT: Cutting costs of electric installations is effected largely through: use of air and small-volume oil switches; simplification of layouts and substation construction by using pantograph-type disconnecting switches; wide usage of switchgear assemblies, including experimental installations with outdoor switchgear assemblies up to 60 kv; automation, and some other measures. In lieu of the classical substation, "simple net" type and "mixed phase" type 63-90 kv substations have been designed and are being built; they provide 75%

Card 1/2

112-57-7-14257

Simplification and Cost Cutting of Step-Down Substations in 90-225 kv Networks . . .

cost saving on one circuit (including the high-voltage equipment).

Bibliography: 2 items. See also Referativnyy zhurnal, Elektrotehnika, 1956,  
14432.

I. M. R.

Card 2/2

VINTER, A.V.; NEKRASOV, A.M.; SYROMYATNIKOV, I.A.; VOZNESENSKIY, A.N.;  
VASILENKO, P.I.; LAUPMAN, P.P.; TERMAN, I.A.; VINOGRADOV, N.P.;  
ANTOSHIN, N.N.; ALEKSANDROV, B.K.; USPENSKIY, B.S.; KLASSON, I.R.;  
KHRYPITS, M.E.; DRUTSKIY, V.F.; KRACHKOVSKIY, N.N.; POPOV, P.A.;  
CHELIDZE, I.M.; FILARETOV, S.N.; KOZLOV, M.D.; BERLIN, V.Ya.;  
SARADZHEV, A.Kh.; GORDZIYEVICH, I.S.; PAK, V.P.; DORFMAN, S.M.;  
DUBINSKIY, L.A.; UL'YANOV, S.A.; GRUDINSKIY, P.G.; KUVSHINSKIY, N.N.;  
~~ERMOLENKO, V.M.~~

Mikhail Mikhailovich Karpov. Elek.sta. 27 no.10:62 0 '56. (MLRA 9:12)  
(Karpov, Mikhail Mikhailovich, d.1956)

GRUDINSKIY PETR GRIGOR'YEVICH

PHASE I BOOK EXPLOITATION

425

Bel'kind, Lev Davidovich; Grudinskiy, Petr Grigor'yevich and  
Moskvitin, Anatoliy Ivanovich

Klavdiy Ippolitovich Shenfer. Moscow, Gosenergoizdat, 1957. 75 p.  
(Series: Deyateli energeticheskoy tekhniki; biograficheskaya  
seriya, vyp. 20) 2,700 copies printed.

Ed.: Antik, I. V.; Tech. Ed.: Voronin, K. P.

PURPOSE: This monograph is intended for wide circles of readers interested in the history of Russian science, for physicists, electrical engineers and researchers studying the history of electrical engineering in Russia.

COVERAGE: The monograph describes the life of K. I. Shenfer who is said to be one of the creators of the Soviet school of

Card 1/5

Klavdiy Ippolitovich Shenfer (Cont.)

425

electromechanics. His activities as electrical engineer, inventor and educator are reviewed. The section "Life and activities of K. I. Shenfer" was compiled by Professors L.D. Bel'kind, P. G. Grudinskiy and A.I. Moskvitin. The section "Scientific Research Work and the Inventions of Academician K. I. Shenfer" was written by Professor A.I. Moskvitin. At the end of the book there is a list of K. I. Shenfer's works and an appendix listing the patents which he received in the USSR for his inventions. No personalities are mentioned. There are no references.

TABLE OF  
CONTENTS:

Foreword	5
Life and Activities of K. I. Shenfer	
Childhood. High-school years (1885-1903)	7
Student years and preparation for scientific and educational activities (1903-1912)	12

Card 2/5

Klavdiy Ippolitovich Shenfer (Cont.)	425
Work at the Moscow Higher Technical School in pre-revolutionary years (1912-1917)	16
Scientific and pedagogical activities at the Electrical Engineering Department of the MVTU and the Moscow Power Engineering Institute (1918-1940)	19
Scientific research work at the All-Union Electrical Engineering Institute (1921-1938)	28
K. I. Shenfer's work in the Academy of Sciences, USSR (1931-1946)	32
Scientific Research Activities and Inventions of Academician K . I. Shenfer	
Works in the field of commutation of electrical machinery	38
Commutation at very low speed	45

Card 3/5

Klavdiy Ippolitovich Shenfer (Cont.) 425

Role of auxiliary poles and distribution of current between brushes operation in parallel	48
Research work on circular fire on commutators	49
Work on a-c commutator machines	51
Work on d-c machines	52
Work on single-armature converters. Single-armature converter with wide voltage control	53
Work in the field of electric traction	54
Work in the field of induction motors	55
Work in the field of synchronous machines	59
K.I. Shenfer and Soviet manufacturing of electrical machines	65
Work on apparatus, instruments, communication technique, general electrical engineering and physics	66
K.I. Shenfer as inventor	67

Card 4/5

Klavdiy Ippolitovich Shenfer (Cont.)	425
Bibliography of K. I. Shenfer's works	69
Appendix	
Main patents and author's certificates issued to K.I. Shenfer in the USSR for his inventions	74
AVAILABLE: Library of Congress	(TK140-S455B4)
Card 5/5	
	JJP/jmr
	7-14-58

GRUDINSKIY, P. G.

*Card 4*

PHASE I BOOK EXPLOITATION

284

- Soveshchaniye elektrikov po voprosu proyektirovaniya elektricheskoy chasti gidrostantsiy, Moscow, 1956

Novoye v proyektirovaniyu elektricheskoy chasti gidroelektrostantsiy  
(Materialy soveshchaniya po proyektirovaniyu i ekspluatatsii)  
(New Developments in the Design of Electric Equipment for Hydro-  
electric Power Plants (Data of the Conference on Design and  
Operation)) Moscow-Leningrad, Gosenergoizdat, 1957, 222 p.  
4,500 copies printed.

Sponsoring agencies (of Conference): Vsesoyuznyy trest po  
proyektirovaniyu gidroelektrostantsiy i hidroelektrouzlov;  
Moskovskoye otdeleniye nauchno-tekhnikeskogo obschchestva  
energopromyshlennosti, Moskovskiy energeticheskiy institut.

Ed.: Demkov, Ye. D.; Tech. Ed.: Fridkin, A.M.; Ed. of the  
Collection: Kheyfits, M.E., Engineer.

PURPOSE: These collected reports are addressed to engineers  
engaged in the design, construction, operation and maintenance  
of electric power plants, as well as to students at power

Card 1/9

New Developments in Design of Electric Equipment (Cont.) 284

engineering and electrical engineering vuzes.

COVERAGE: A conference of electrical engineers engaged in the design, construction, operation and maintenance of hydroelectric power plants and electric power distribution systems was held in Moscow from May 16th to May 24, 1956. The conference was organized by Gidroenergoprojekt (All-Union Trust for the Design and Planning of Hydroelectric Power Plants and Developments) in collaboration with MONTOEP (Moscow Branch of the Scientific and Technical Society of the Electrical Industry) and the Moskovskiy energeticheskiy institut (Moscow Power Engineering Institute). Several related design organizations, as well as the Ministries of the Electrical Industry, of Electric Power Plants and of Electric Power Plant Construction also participated. The reports in this collection reflect the latest views on the design and planning of the electrical equipment of hydroelectric stations and on their requirements for equipment. Special attention is given to problems of automation and remote control of stations and systems. These reports are concerned to a very great extent with the descriptions and appraisal of considerable quantities of

Card 2/9

## New Developments in Design of Electric Equipment (Cont.) 284

Soviet-produced electrical equipment. There is a list of Soviet personalities and organizations which took part in the conference (pp. 205-215). In several of the reports reference is made to Soviet power engineers who have made important contributions in the field. There are 34 references, of which 27 are Soviet (pp. 157, 169, 197 and 205), three English, two Italian, one French and one Swedish (p. 196).

TABLE OF  
CONTENTS:

Preface	3
Uspenskiy, B.S. Recent Trends in the Design of Electrical Equipment for Hydroelectric Power Plants in the USSR	5
Antoshin, N.N. Some Special Features of the Electrical Equipment of Foreign Hydroelectric Power Plants	14
Venikov, V.A. Recent Trends in Stability Problems in Long-Distance Electric Power Transmission	19
Card 3/9	

New Developments in Design of Electric Equipment (Cont.)	284
Grudinsky, P.G. Fault Analysis in 110 to 220-kv Power Switchboards and Conclusions for Design Purposes	29
Lisovskiy, G.S. Main Electrical Connection Systems for Hydroelectric Power Plants	35
Chumburidze, I.P. Main Electrical Connection Systems for Hydroelectric Power Plants and Substations	44
Karaulov, A.A. Alternating Current Requirements for Auxiliary Power System of a Hydroelectric Power Plant	50
Nikolayshvili, M.S. Alternating Current Plant Auxiliary Power Systems for Medium Capacity Hydroelectric Power Plants	58
Kheyfets, I.D. Standard Open-type Switching Structures for 35 to 220-kv Hydroelectric Power Plants	61
Zlobina, V.I. Electrical Equipment of Run-of-River Hydroelectric Power Plant Structures of Standard Design	69

Card 4/9

New Developments in Design of Electric Equipment (Cont.)	284
Gogua, L.K. New Standard 35 and 110-kv Stepdown Substations	77
Dvoskin, L.I. New Designs in 6 to 110-kv Enclosed-type Switching Structures and in 35 to 400-kv Open-type Switching Structures	91
Bykov, G.P. Observations on the Design of the Electrical Equipment of the Kakhovka Hydroelectric Power Plant	93
Oranskiy, I.N. The Electrical Equipment of Hydroelectric Power Plants Built on Irrigation Canals	95
Shakhov, G.V. Experience in Operating the Electrical Equipment of the Krasnopolyanskaya Hydroelectric Power Plant	102
Men'shikov, S.V. Experience in Operating the Electrical Equipment of the Lenenergo System Hydroelectric Power Plant	103

Card 5/9

New Developments in Design of Electric Equipment (Cont.)	284
Makeyev, M. Ye. Experience in Operating the Dubossary Hydroelectric Power Plant	105
Ratsbaum, V.D. Experience in Operating the Electrical Equipment of the Farkhad Hydroelectric Power Plant	106
Kazaryan, A.A. The Electrical Equipment of the Tsimlyanskaya Hydroelectric Power Plant	108
Tsetlin, B.M. The Electrical Equipment of the Knyazhaya Guba Hydroelectric Power Plant	109
Kalina, M.F. Observations on the Design of the Ust'- Kamennogorsk Hydroelectric Power Plant	111
Zarkhi, M.I. Experience in Operating the Electric Equipment of a Kolenergo System Hydroelectric Power Plant	113
Sakov, A.D. Over-all Station and Individual Unit Control Stations	116

Card 6/9

New Developments in Design of Electric Equipment (Cont.)	284
Khodnev, V.V. Assembled Panel Structures for Automatic Control and Protection of Hydroelectric Power Plants	118
Kheyfets, I.D. Direct Current Requirements of Hydroelectric Power Plant Auxiliary Power System	120
Uspenskiy, Yu. M. Hydroelectric Power Plant Relay Protection and Automation System Operating on Plant Alternating Current	126
Neyman, V.A. Assembly of Hydroelectric Power Plant Electrical Equipment and Requirements for Improving Planning and Estimates	131
Petrov, B.M. The Automation of Water Wheel Generator Units	133
Losyatinskiy, A.Z. Improving Design and Equipment of Water Wheel Generator Unit Automation Systems on the Basis of Experience in Operation, Maintenance and Adjustment	139

Card 7/9

New Developments in Design of Electric Equipment (Cont.)	284
Pokrovskiy, B.M. The Question of Doing Away with High-Speed Gates in Hydroelectric Power Plants	147
Rosman, L.V. Some Problems of Generator Excitation in Completely Automated Hydroelectric Power Plants	148
Krumina, V.A. Automation Devices at the Kegumskaya Hydroelectric Power Plant and Experience in Their Operation	158
Barkan, Ya. D. Possibilities of Automation of Voltage Control and of Reactive Load Distribution in Electric Power Systems	159
Fedorov, B.A. Main Tendencies in the Automation and Telemechanization of Electric Power Systems and Hydroelectric Power Plants	170
Derman, B.A. Hydroelectric Power Plant Staff and Operating Personnel	174
Antoshin, N.N. Assembled Switchboard Structures in the USSR and Other Countries	185

Card 8/9

New Developments in Design of Electric Equipment (Cont.)	284
Ramendik, E.B. Standard Substations to Meet Temporary Electric Power Requirements at Hydroelectric Power Plant Construction Sites Synopsis of Addresses Made Concerning the Reports	205
Resolution Made by the Conference	215
List of Organizations Participating in the Conference	223

AVAILABLE: Library of Congress (TK1081.S651956)

JJP/ksv  
7-30-58

Card 9/9

ALEKSANDROV, A.G., dots; ARONOVICH, I.S., inzh.; BABIKOV, M.A., doktor tekhn.nauk; BATUSOV, S.V., kand.tekhn.nauk; BKL'KIND, L.D., doktor tekhn.nauk; VENIKOV, V.A., doktor tekhn.nauk; VESELOVSKIY, O.N., kand.tekhn.nauk; GOLOVAN, A.T., doktor tekhn.nauk; GOLUBTSOVA, V.A., doktor tekhn.nauk; GREYNER, L.K., inzh.; GRUDINSKIY, P.G., prof.; GUSEV, S.A., inzh.; DMOKHOVSKAYA, L.F., kand.tekhn.nauk; DROZDOV, N.G., doktor tekhn.nauk; IVANOV, A.P., doktor tekhn.nauk [deceased]; KAGANOV, I.L., doktor tekhn.nauk; KERBER, L.L., inzh.; KOCHENOVA, A.I., kand.tekhn.nauk.; LARIONOV, A.N.; MINOV, D.K., doktor tekhn.nauk; METUSHIL, A.V., doktor tekhn.nauk; NIKULIN, N.V., kand.tekhn.nauk; NILMIDER, R.A., prof.; PAINTYUSHIN, V.S., prof.; PASYINKOV, V.V., doktor tekhn.nauk; PETROV, G.H., doktor tekhn.nauk; POLIVANOV, K.M., doktor tekhn.nauk; PRIVEZHTSEV, V.A., doktor tekhn.nauk; RADUNSKIY, L.D., inzh.; RENNE, V.T., doktor tekhn.nauk; SVENCHAIISKIY, A.D., doktor tekhn.nauk; SOLOV'YEV, I.I., doktor tekhn.nauk; STUPEL' F.A. kand.tekhn.nauk; TALITSKIY, A.V., prof.; TEMNIKOV, F.Ye., kand.tekhn. nauk; FEGOROV, L.I., inzh.; FEDOSEYEV, A.M., doktor tekhn.nauk; KHOLYAVSKIY, G.B., inzh.; GHECHET, Yu.S., doktor tekhn.nauk; SHNEY-BERG, Ya.▲., kand.tekhn.nauk; SHUMILOVSKIY, N.N., doktor tekhn.nauk; ANTIK, I.B., red.; MEDVEDEV, L.Ya., tekhn.red.

[The history of power engineering in the U.S.S.R. in three volumes]  
Istoriia energeticheskoi tekhniki SSSR v trekh tomakh. Moskva, Gos. energ. izd-vo.

(Continued on next card)

ALEKSANDROV, A.G.--(continued) Card 2.

Vol.2. [Electric engineering] Elektrotehnika. Avtorskii kollektiv  
toma: Aleksandrov i dr. 1957. 727 p. (MIRA 11:2)

1. Moscow, Moskovskiy energeticheskiy institut. 2. Chlen-korrespondent AN SSSR (for Larionov)  
(Electric engineering)

GRUDINSKIY, P.G.

1900. STANDARDS FOR ECONOMIC CURRENT DENSITY

P.G. Grudinskii and E.N. Prikhodko

Elektrichesvo, 1957, No. 3, 43-7. In Russian.

As introduced into the Soviet Union in 1943 standardization was based on Kelvin's law. The Kelvin formula, however, allows for interest on investment and takes into account the unavailability of the line alone, and not of the system as a whole, a conception contrary to Soviet principles. General recognition is now being accorded to a variant by S.A. Kukolkravets involving a current density formula which provides for a lower outlay over a fixed term of years.

Central Electricity Authority Digest

AUTHOR: Grudinskiy, P.G., Professor.

104-3-20/45

TITLE: On allowing for the load capacity in selecting transformers.  
(Ob uchete nagruzochnoy sposobnosti pri vybore transformatorov)

PERIODICAL: "Elektricheskiye Stantsii" (Power Stations), 1957,  
Vol. 28, No.3, pp. 61 - 65 (U.S.S.R.)

ABSTRACT: In recent years 5 kW of transformers have been installed in the USSR for every kilowatt of generating plant. The amount of transformer capacity required could be much reduced if the total load carrying capacity of the transformers were taken into account, in selecting them, for it is at least 20 - 30% more than the rated load. The question then arises whether it is economically advisable to load transformers in this way. Cost equations are then derived. It is shown that the cost equations are based on the costs of 1 kWh of losses and these are different at full and no load. Therefore, the cost of losses must be determined by working out fully the case of a power system with heavy and with light loadings. Further equations are then derived and graphs are given of the cost of 110 kV transformers in thousands of Roubles over a ten year period against the output for different loadings, and graphs showing the loads at which transformers of the next standard

Card 1/2

104-3-20/45

On allowing for the load capacity in selecting transformers.  
(Cont.)

rating up or down should be chosen. It is concluded that the existing range of standard transformer outputs does not form a convenient series from the economic standpoint. Whether a transformer should work lightly or heavily loaded depends on the characteristics of the transformer and the conditions under which it operates (load factor, load increase, distance from power station and so on). The best choice in particular cases is stated. In most cases when two transformers work in parallel and act as spares for one another, provision should be made for special forced cooling when one transformer has to operate alone under emergency conditions. Allowance for load increase has a big effect on the choice of transformer rating. There are 3 figures.

ASSOCIATION: Moscow Power Institute (Moskovskiy Energeticheskiy Institut)

AVAILABLE: Library of Congress  
Card 2/2

GRUDINSKIY, P.G., prof.; SYROMYATNIKOV, I.A., prof.

Electric systems in the U.S.S.R. during the past 40 years.  
Elek.sta. 28 no.11:47-52 N '57. (MIRA 10:11)  
(Electric power)

SYROMYATNIKOV, I.A.; GRUDINSKIY, P.G.; PETROV, I.I.; KOROL'KOVA, V.I.;  
SERBINOVSKIY, G.V.; BOL'SHAM, Ya.M.; LIVSHITS, D.A.; FAYERMAN, A.I.  
NAYFELD, M.P.; ZHIVOV, M.S.; ONKIN, A.K. (Moskva)

Candidate of engineering L. P. Podol'skii. Elektrichestvo no.1:96  
Ja '58. (MIRA 11:2)  
(Podol'skii, Lev Petrovich, 1887)

AUTHORS: Venikov, V. A., Veyts, V. I., 307/105-58-7-27/52  
Glazunov, A.A., Grudinskiy, P.G.,  
Frobst, A. Ye., Petrov, G. N., Russakovskiy, Ye. A.,  
Shershov, S. F., Teleshov, B. A.

TITLE: In Memoriam "Professor S. A. Kukel' - Krayevskiy, Doctor of  
Industrial Engineering." (Pamyati doktora tekhniko-  
-ekonomicheskikh nauk, prof. S. A. Kukel' - Krayevskogo)  
On His 75th Birthday (K 75-letiyu so dnya rozhdeniya)

PERIODICAL: Elektrичество, 1958, Nr 7, pp. 91 - 92 (USSR)

ABSTRACT: Sergey Andreyevich Kukel' - Krayevskiy was born on January  
26th, 1883. He graduated with distinction from the Naval  
College in St. Petersburg, served in the navy as mine  
officer, taught mine engineering and carried out research  
work in the field of wireless telegraphy. He held lectures  
on the application of electrical engineering in submarines.  
His first papers on electrical engineering were published  
from 1908 to 1912. In 1912 he entered the St. Petersburg  
Polytechnical Institute, he received, however, his certificate,  
later because of the beginning of the war. In World War I

Card 1/3

In Memoriam Professor S. A. Kukel' - Krayevskiy, SOV/105-58-7-27/32  
Doctor of Industrial Engineering On His 75<sup>th</sup> Birthday

he was commander of the submarine fleet and engineer, from 1919 - 1920 base-commandant of the Caspian Fleet, from 1920 to 1921 he taught electrical engineering at the Naval College. After demobilization he was President of the Afghan-Soviet Technical Commission in Afghanistan, from 1922 to 1930 head of the Department of Electrification at the Glavelektro. Since that time till his death in 1941 his activity has been connected with the development of the electrical engineering of the USSR. At the same time he taught at the Institut narodnogo khozyaystva im. Plekhanova (Institute of Economics imeni Plekhanov) and from 1930 on at the Moskovskiy energeticheskiy institut (Moscow Institute of Power Engineering). In 1924 he was the representative of the USSR in London in the First International Conference of Power Engineering. He did scientific work at the Energeticheskiy institut im. G. M. Krzhizhanovskogo (Institute of Power Engineering imeni G. M. Krzhizhanovski, as USSR). He attended actively the conferences on the problems of the Great Volga. He published more than 60 papers and a series of monographs. He died on July 22nd, 1941. There is 1 photograph.

Card 2/3

In Memoriam Professor S. A. Kukel' - Krayevskiy, SOV/105-58-7-27/32  
Doctor of Technical Economics  
On His 75<sup>th</sup> Birthday

1. Mechanics (Personnel)--USSR

Card 3/3

G.RUDINSKY, P.G.

Meeting Number: 18 December 1959  
Title: Use of Mathematical Methods in the Solution  
of Industrial Economic Problems

- 1) G. Aron - The Selection of Efficient Techniques for the  
Sale, Purchase or Lease on the Basis of the Labor  
Input Factor
- 2) N. Dvorkin - The Comparative-Analytical Method of Determining  
the Size, Scope of Specialization and Location of  
Multi-Processing Enterprises
- 3) I. M. Kholodov - The Application of Electronic Computational  
Techniques to Technical Enterprise Operations
- 4) G. A. Kostylev - Mathematical Methods in the Organization and  
Planning of Production
- 5) A. A. Krasov - The Application of Linear Programming Methods to  
Agricultural Economic Problems
- 6) Yu. A. Krasin, B. I. Kostomarov - On the Problem of Determining  
Basis in Optimizing Service Production
- 7) A. M. Lur'e - A Simplified Method for Economic Organization of  
Alternative Technological Decisions in the Chemical Industry
- 8) F. G. Sosulin - The Economic and Computational Characteristics  
of the Efficiency Coefficient of Additional Capital  
Investments

2. Plenary Session - 20 December 1959, 1600 hours

- 1) Adoption of Decisions by the Conference
- 2) Construction Committee (for the same and on the Instruction of the  
Chairman of the Conference)

Report: Under the name of the entire Conference, 20 December 1959, Instructions of Organization  
Method in Economic Planning, Conference, 19-20 January 1960

CHILIKIN, M.G.; SIROTINSKIY, L.I.; VENIKOV, V.A.; UL'YANOV, S.A.;  
GRUDINSKIY, P.G.; FEDOSEYEV, A.M.; SOLOV'YEV, I.I.; DROZDOV, N.G.;  
SYROMYATNIKOV, I.A.

Aleksandr Aleksandrovich Glazunov; obituary. Elektrichestvo  
(MIRA 13:8)  
no.8:88-89 Ag '60.  
(Glazunov, Aleksandr Aleksandrovich, 1891-1960)